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NOTICE OF ALLOWANCE AND FEE(S) DUE

86378

7590

07/08/2010

EXAMINER

MENON, KRISHNAN S

Pearne & Gordon LLP 1801 East 9th Street Suite 1200 Cleveland, OH 44114-3108 MENON, KRISHNAN S

ART UNIT PAPER NUMBER

1797 DATE MAILED: 07/08/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/708,774 | 03/24/2004 | Juergen Dannenmaier | GAMB-42881US1 | 2773 |

TITLE OF INVENTION: FILTER DEVICE HAVING MORE THAN ONE FILTRATION COMPARTMENT

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 10/08/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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| Pearne & Gordon LLP 1801 East 9th Street Suite 1200 | | | | Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. | | | |
| Cleveland, OH 4 | 14114-3108 | | | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | L | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO | OR | ATTC | DRNEY DOCKET NO. | CONFIRMATION NO. |
| 10/708,774 TITLE OF INVENTION | 03/24/2004 I: FILTER DEVICE HA | VING MORE THAN ON | Juergen Dannenmaie IE FILTRATION COMF | | G. | AMB-42881US1 | 2773 |
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| nonprovisional | NO | \$1510 | \$300 | \$0 | | \$1810 | 10/08/2010 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | ٦ | | | |
| MENON, KI | MENON, KRISHNAN S | | 210-321600 | _ | J | | |
| "Fee Address" ind PTO/SB/47; Rev 03-(Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Uni | ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Com | " Indication form ted. Use of a Customer A TO BE PRINTED ON | data will appear on the | atively, ngle firm (having as r agent) and the na ttorneys or agents. I be printed. type) patent. If an assignment. | a memb mes of u f no nan | per a 2p to ne is 3dentified below, the do | ocument has been filed for |
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| | are submitted: No small entity discount p # of Copies | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | | |
| 5. Change in Entity Sta | itus (from status indicate as SMALL ENTITY state | | □ b. Applicant is no l | onger claiming SM | AII EN | TITY status. See 37 CF | FR 1.27(α)(2) |
| ** | d Publication Fee (if rea | uired) will not be accepte | ed from anyone other tha | • • | | | e assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | Registration No. | | | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223 | tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DC | FR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR | on is required to obtain on the collection is the collection is the collection is the collection of the collection is required to be collection. | or retain a benefit by estimated to take 12 dividual case. Any icer, U.S. Patent an TO THIS ADDRE | the pub 2 minute commen d Trader SS. SEN | lic which is to file (and s to complete, includin ts on the amount of tir nark Office, U.S. Depa D TO: Commissioner f | by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. for Patents, P.O. Box 1450, |

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| Pearne & Gordon LLP | | | MENON, KI | RISHNAN S | |
| 1801 East 9th Street | | | | ART UNIT | PAPER NUMBER |
| Suite 1200 Cleveland, OH 4 | 4114-31 | 08 | | 1797 DATE MAILED: 07/08/201 | 0 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1596 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1596 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| | 10/708,774 | DANNENMAIER ET AL. | | | | |
| Notice of Allowability | Examiner | Art Unit | | | | |
| | Krishnan S. Menon | 1797 | | | | |
| The MAILING DATE of this communication appearable claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI | (OR REMAINS) CLOSED in this ap or other appropriate communicatio GHTS. This application is subject to | oplication. If not included n will be mailed in due course. THIS | | | | |
| 1. This communication is responsive to <u>RCE 6/16/10</u> . | | | | | | |
| 2. \boxtimes The allowed claim(s) is/are <u>10-12,14,15 and 33-43</u> . | | | | | | |
| 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | been received. been received in Application No | | | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | complying with the requirements | | | | |
| A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | | | | | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | t be submitted. | | | | | |
| (a) ☐ including changes required by the Notice of Draftspers | on's Patent Drawing Review (PTO | -948) attached | | | | |
| 1) hereto or 2) to Paper No./Mail Date | | | | | | |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date | | | | | | |
| Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t | | | | | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | | | | | |
| | | | | | | |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 5. ☐ Notice of Informal I 6. ☐ Interview Summary Paper No./Mail Da 7. ☒ Examiner's Amend 8. ☐ Examiner's Statem 9. ☐ Other | / (PTO-413), ate | | | | |
| | | | | | | |

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. John Murtaugh on 6/30/10.

The application has been amended as follows:

List of amended claims appear on a fresh page below.

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1-9. (cancelled)

- 10. (previously presented) A filter device comprising a housing, said housing enclosing at least two fluid filtration compartments, each filtration compartment comprising at least one filter membrane having a first surface and a second surface, said first surface of each filter membrane being in fluid communication with at least one fluid flow port, said second surface being in fluid communication with at least one fluid flow port, adjacent filtration compartments being separated from each other by an internal wall, said housing comprising at least two longitudinally extending shell portions, one of said longitudinally extending shell portions of the housing describing less than one half of the perimeter of said housing, wherein said internal wall comprises a first part and a second part, said first part being attached to a first longitudinally extending shell portion and said second part being attached to a second longitudinally extending shell portion, said first part having a free edge and said second part having a free edge, said free edges being configured to join to each other.
- 11. (original) The filter device of Claim 10, wherein each longitudinally extending shell portions has two longitudinal edges, the longitudinal edges of adjacent shell portions being configured to join to each other, and wherein the free edge of a wall part attached to a shell portion is not coplanar with the longitudinal edges of said shell portion.
- 12. (original) The filter device of Claim 11 wherein a larger one of said longitudinally extending shell portions of the housing describes more than one half of the perimeter of said housing and wherein said free edge of said wall part attached to said larger shell portion extends beyond a plane containing said longitudinal edges of said larger shell portion.

13. (cancelled)

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14. (previously presented) A filter device comprising a housing, said housing enclosing at least two fluid filtration compartments, each filtration compartment comprising at least one filter membrane having a first surface and a second surface, said first surface of each filter membrane being in fluid communication with at least one fluid flow port, said second surface being in fluid communication with at least one fluid flow port, adjacent filtration compartments being separated from each other by an internal wall, said housing comprising at least two longitudinally extending shell portions, one of said longitudinally extending shell portions of the housing describing less than one half of the perimeter of said housing; wherein one of said longitudinally extending shell portions has a first refractive index and another of said longitudinally extending shell portions has a second refractive index, said first refractive index being different from said second refractive index.

15. (original) The filter device of Claim 14 wherein said one of said longitudinally extending shell portions is comprised of polycarbonate and said another of said longitudinally extending shell portions is comprised of polypropylene.

16-32. (cancelled)

33. (rejoined and currently amended) A method of making a filter device comprising the steps of

forming a housing for enclosing at least two fluid filtration compartments, said housing comprising at least two longitudinally extending shell portions, one of said longitudinally extending shell portions of the housing describing less than one half of the perimeter of said housing, adjacent filtration compartments being separated from each other by an internal wall,

placing at least one filter membrane having a first surface and a second surface longitudinally in each filtration compartment;

closing said shell portions around said filter membranes to form said fluid filtration compartments;

sealing adjacent edges of said shell portions;

imbedding ends of said filter membranes in a potting compound; and

capping the ends of said housing; said method further comprising providing at least two spaced apart generally planar walls in each fluid filtration compartment, said walls being in a

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parallel relationship to each other and packing a plurality of filter membranes between said walls; said method

The method of claim 32, further comprising

forming one of said longitudinally extending shell portions from a substantially clear, uncoloured material at at least a boundary thereof,

forming another of said longitudinally extending shell portions of a coloured material at at least a boundary of said another shell portion, and

wherein said step of sealing adjacent edges comprises differential heating of said colored material and said uncoloured material by laser or electromagnetic radiation.

34. (rejoined and currently amended) A method of making a filter device comprising the steps of

forming a housing for enclosing at least two fluid filtration compartments, said housing comprising at least two longitudinally extending shell portions, one of said longitudinally extending shell portions of the housing describing less than one half of the perimeter of said housing, adjacent filtration compartments being separated from each other by an internal wall,

placing at least one filter membrane having a first surface and a second surface longitudinally in each filtration compartment;

closing said shell portions around said filter membranes to form said fluid filtration compartments;

sealing adjacent edges of said shell portions;

imbedding ends of said filter membranes in a potting compound; and

capping the ends of said housing; said method further comprising providing at least two spaced apart generally planar walls in each fluid filtration compartment, said walls being in a parallel relationship to each other and packing a plurality of filter membranes between said walls; said method The method of claim 32, further comprising

forming one of said longitudinally extending shell portions from a first material having a first refractive index and

forming another of said longitudinally extending shell portions from a second material having a second refractive index, said first refractive index being different from said second refractive index, and

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wherein said step of sealing adjacent edges comprises differential heating of said first material and said second material by laser or electromagnetic radiation.

35. (rejoined) The method of claim 34 comprising

forming said one of said longitudinally extending shell portions from polycarbonate, and forming said another of said longitudinally extending shell portions from polypropylene.

36. (original) A filter device comprising

a housing, said housing having

at least two longitudinally extending shell portions

one of said longitudinally extending shell portions having a first optical property and

another of said shell portions having a second optical property, said first optical property being different from said second optical property,

at least one filter membrane disposed within said housing and extending longitudinally from a first end to a second end of said housing,

end caps closing said ends of said housing, and at least one access port for introducing fluid into or out of said filter device.

- 37. (rejoined) The filter device of Claim 36 wherein said optical property is colour.
- 38. (original) The filter device of Claim 36 wherein said optical property is a refractive index.
- 39. (original) The filter device of Claim 38 wherein said one of said longitudinally extending shell portions is comprised of polycarbonate and said another of said longitudinally extending shell portions is comprised of polypropylene.
- 40. (rejoined) The filter device of Claim 36, wherein said longitudinally extending shell portions are welded together.
- 41. (rejoined) The filter device of Claim 40, wherein said longitudinally extending shell portions are laser welded.

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42. (rejoined) The filter device of Claim 40, wherein said longitudinally extending shell portions are ultrasound welded.

43. (rejoined) The filter device of Claim 36 wherein said housing further comprises an internal wall, said wall separating said housing into first and second compartments, said wall having

a first wall portion extending from said one of said longitudinally extending shell portions and having said first refractive index and

a second wall portion extending from said another of said longitudinally extending shell portions and having said second refractive index, said first wall portion being welded to said second wall portion.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/ Primary Examiner, Art Unit 1797